Claims

We Claim:

1. A hydrostatic transmission comprising:

a hydraulic pump driven by a pump shaft and a hydraulic motor engaged to and driving a motor shaft, wherein the pump and motor are mounted in a sump;

a center section mounted in the sump and supporting the hydraulic pump and hydraulic motor, the center section comprising:

a pump running surface having a first opening formed therein to receive the pump shaft;

a first structure extending upward from and generally perpendicular to the pump running surface and comprising a second opening extending generally parallel to the pump running surface; and

a second structure extending upward from and generally perpendicular to the pump running surface and comprising a third opening extending generally parallel to the pump running surface.

2. The hydrostatic transmission of claim 1, wherein the first structure further comprises a motor running surface for supporting the hydraulic motor.

3. The hydrostatic transmission of claim 1, wherein the first opening extends through the first structure.

4. The hydrostatic transmission of claim 3, wherein the second opening supports the motor shaft.

5. The hydrostatic transmission of claim 4, wherein the pump shaft and motor shaft overlap when viewing the center section along a line of sight parallel to the pump running surface and between the first structure and the second structure.

6. The hydrostatic transmission of claim 8, further comprising a bearing positioned within the second opening.

7. The hydrostatic transmission of claim 1, wherein the third opening extends through the second structure.

8. The hydrostatic transmission of claim 1, wherein the first opening and the second opening are co-linear.

9. The hydrostatic transmission of claim 1, wherein the first structure and the second structure are positioned on generally opposite sides of the center section.

10. A center section for a hydrostatic transmission comprising:

a pump running surface for a hydraulic pump;

a first structure extending upward from and generally perpendicular to the pump running surface and defining a first plane, the first structure having a first opening formed therein parallel to the pump running surface;

a second structure extending upward from and generally perpendicular to the pump running surface and defining a second plane, the second structure having a second opening formed therein parallel to the pump running surface; and

wherein the pump running surface is positioned between the first plane and the second plane.

11. The center section of claim 10, wherein the first structure further comprises a motor running surface for a hydraulic motor.

12. The center section of claim 11, wherein the first opening extends through the first structure.

13. The center section of claim 12, wherein the opening in the first structure supports a motor output shaft.

14. The center section of claim 13, further comprising a bearing positioned within the first opening.

15. The center section of claim 10, further comprising a third opening formed on the pump running surface to support a pump input shaft.

16. The center section of claim 10, wherein the second opening extends through the second structure.

17. The center section of claim 10, wherein the first structure is integrally formed as part of the center section.

18. The center section of claim 17, wherein the second structure is integrally formed as part of the center section.

19. A center section for a hydrostatic transmission comprising:

a pump running surface comprising an opening;

a plurality of attachment openings formed in the center section and extending generally perpendicular to the pump running surface;

a first structure extending upward from and generally perpendicular to the pump running surface and comprising a first opening extending generally parallel to the pump running surface; and

a second structure extending upward from and generally perpendicular to the pump running surface and comprising a second opening extending generally parallel to the pump running surface, wherein the first opening and the second opening are generally co-linear.